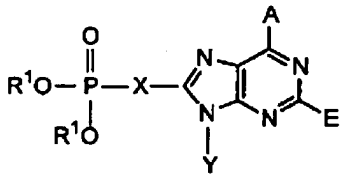
AMENDMENT

In the claims:

Please amend the claims as indicated below. A complete set of all claims previously submitted, including the status for each claim, immediately follows below.

1. – 44. Previously Cancelled

45. (Previously Added) A method of preventing type II diabetes in animals comprising administering to animals at risk of developing type II diabetes a pharmaceutically effective amount of a compound of formula 1:



wherein

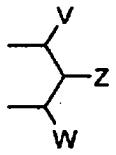
A is selected from the group consisting of $-NR^8_2$, $-NHSO_2R^3$, $-OR^5$, $-SR^5$, halo, lower alkyl, $-CON(R^4)_2$, guanidino, amidino, –H, and perhaloalkyl;

E is selected from the group consisting of –H, halo, lower alkylthio, lower perhaloalkyl, lower alkyl, lower alkenyl, lower alkynyl, lower alkoxy, –CN, and $-NR^7_2$;

X is selected from the group consisting of -alk-NR–, alkylene, alkenylene, alkynylene, arylene, heteroarylene, -alk-NR-alk-, -alk-O-alk-, -alk-S-alk-, -alk-S–, alicyclicene, heteroalicyclicene, 1,1-dihaloalkylene, –C(O)-alk-, –NR–C(O)–NR'–, -alk-NR–C(O)–, -alk-C(O)–NR–, -Ar-alk-, and -alk-Ar-, all optionally substituted, wherein each R and R' is independently selected from –H and lower alkyl, and wherein each "alk" and "Ar" is an independently selected alkylene or arylene, respectively;

Y is selected from the group consisting of –H, alkyl, alkenyl, alkynyl, aryl, alicyclic, heteroalicyclic, aralkyl, aryloxyalkyl, alkoxyalkyl, $-C(O)R^3$, $-S(O)_2 R^3$, $-C(O)-OR^3$, $-CONHR^3$, $-NR^2_2$, and $-OR^3$, all except H are optionally substituted;

R^1 is independently selected from the group consisting of –H, alkyl, aryl, heteroalicyclic where the cyclic moiety contains a carbonate or thiocarbonate, $-C(R^2)_2$ -aryl, -alk-aryl, $-C(R^2)_2 OC(O)NR^2_2$, $-NR^2-C(O)-R^3$, $-C(R^2)_2-OC(O)R^3$, $-C(R^2)_2-O-C(O)OR^3$, $-C(R^2)_2 OC(O)SR^3$, -alk-S–C(O)R^3, -alk-S–S-alkylhydroxy, and -alk-S–S–S-alkylhydroxy, or together R^1 and R^1 are -alk-S–S-alk- to form a cyclic group, wherein each "alk" is an independently selected alkylene, or together R^1 and R^1 are



wherein

V and W are independently selected from the group consisting of hydrogen, aryl, substituted aryl, heteroaryl, substituted heteroaryl, 1-alkenyl, 1-alkynyl, and $-R^9$; or

together V and Z are connected via a chain of 3-5 atoms, only one of which can be a heteroatom, to form part of a cyclic group substituted with hydroxy, acyloxy, alkoxycarboxy, or aryloxycarboxy attached to a carbon atom that is three atoms from an oxygen attached to the phosphorus; or

together V and W are connected via a chain of 3 carbon atoms to form part of a cyclic group substituted with hydroxy, acyloxy, alkoxycarboxy, alkylthiocarboxy, hydroxymethyl, or aryloxycarboxy attached to a carbon atom that is three atoms from an oxygen attached to the phosphorus;

Z is selected from the group consisting of $-CH_2 OH$, $-CH_2 OCOR^3$, $-CH_2 OC(O)SR^3$, $-CH_2 OCO_2 R^3$, $-SR^3$, $-S(O)R^3$, $-CH_2 N_3$, $-CH_2 NR^2_2$, $-CH_2 Ar$, $-CH(Ar)OH$, $-CH(CH=CR^2 R^2)OH$, $-CH(C\equiv CR^2)OH$, and $-R^2$;

with the provisos that:

a) V, Z, W are not all –H; and

b) when Z is $-R^2$, then at least one of V and W is not –H or $-R^9$;

R^2 is selected from the group consisting of R^3 and –H;

R^3 is selected from the group consisting of alkyl, aryl, alicyclic, heteroalicyclic, and aralkyl;

R^4 is independently selected from the group consisting of –H, lower alkyl, lower alicyclic, lower heteroalicyclic, lower aralkyl, and lower aryl;

R^5 is selected from the group consisting of lower alkyl, lower aryl, lower aralkyl, lower alicyclic, and lower heteroalicyclic;

R^6 is independently selected from the group consisting of –H, and lower alkyl;

R^7 is independently selected from the group consisting of –H, lower alkyl, lower alicyclic, lower heteroalicyclic, lower aralkyl, lower aryl, and $-C(O)R^{10}$;

R^8 is independently selected from the group consisting of –H, lower alkyl, lower aralkyl, lower aryl, lower alicyclic, $-C(O)R^{10}$, or together said R^8 groups form a bidendate alkylene;

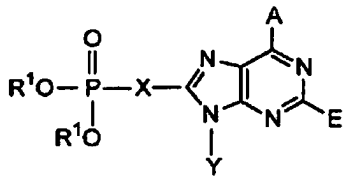
R^9 is selected from the group consisting of alkyl, aralkyl, alicyclic, and heteroalicyclic;

R^{10} is selected from the group consisting of –H, lower alkyl, $-NH_2$, lower aryl, and lower perhaloalkyl;

R^{11} is selected from the group consisting of alkyl, aryl, –OH, $-NH_2$ and $-OR^3$; and

pharmaceutically acceptable prodrugs and salts thereof.

46. (Currently Amended) A method of treating impaired glucose tolerance comprising administering to patients ~~in need thereof~~ a pharmaceutically effective amount of an FBPase inhibitor of formula 1:



wherein

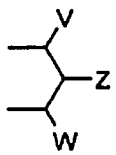
A is selected from the group consisting of $-NR^8_2$, $-NHSO_2R^3$, $-OR^5$, $-SR^5$, halo, lower alkyl, $-CON(R^4)_2$, guanidino, amidino, –H, and perhaloalkyl;

E is selected from the group consisting of –H, halo, lower alkylthio, lower perhaloalkyl, lower alkyl, lower alkenyl, lower alkynyl, lower alkoxy, –CN, and $-NR^7_2$;

X is selected from the group consisting of -alk-NR–, alkylene, alkenylene, alkynylene, arylene, heteroarylene, -alk-NR-alk-, -alk-O-alk-, -alk-S-alk-, -alk-S–, alicyclicene, heteroalicyclicene, 1,1-dihaloalkylene, –C(O)-alk-, –NR–C(O)–NR'–, -alk-NR–C(O)–, -alk-C(O)–NR–, -Ar-alk-, and -alk-Ar-, all optionally substituted, wherein each R and R' is independently selected from –H and lower alkyl, and wherein each "alk" and "Ar" is an independently selected alkylene or arylene, respectively;

Y is selected from the group consisting of –H, alkyl, alkenyl, alkynyl, aryl, alicyclic, heteroalicyclic, aralkyl, aryloxyalkyl, alkoxyalkyl, $-C(O)R^3$, $-S(O)_2R^3$, $-C(O)–OR^3$, $-CONHR^3$, $-NR^2_2$, and $-OR^3$, all except H are optionally substituted;

R^1 is independently selected from the group consisting of –H, alkyl, aryl, heteroalicyclic where the cyclic moiety contains a carbonate or thiocarbonate, $-C(R^2)_2$ -aryl, -alk-aryl, $-C(R^2)_2OC(O)NR^2_2$, $-NR^2–C(O)–R^3$, $-C(R^2)_2–OC(O)R^3$, $-C(R^2)_2–O–C(O)OR^3$, $-C(R^2)_2OC(O)SR^3$, -alk-S–C(O)R^3, -alk-S–S-alkylhydroxy, and -alk-S–S–S-alkylhydroxy, or together R^1 and R^1 are -alk-S–S-alk- to form a cyclic group, wherein each "alk" is an independently selected alkylene, or together R^1 and R^1 are



wherein

V and W are independently selected from the group consisting of hydrogen, aryl, substituted aryl, heteroaryl, substituted heteroaryl, 1-alkenyl, 1-alkynyl, and $-R^9$; or

together V and Z are connected via a chain of 3-5 atoms, only one of which can be a heteroatom, to form part of a cyclic group substituted with hydroxy, acyloxy, alkoxycarboxy, or aryloxycarboxy attached to a carbon atom that is three atoms from an oxygen attached to the phosphorus; or

together V and W are connected via a chain of 3 carbon atoms to form part of a cyclic group substituted with hydroxy, acyloxy, alkoxycarboxy, alkylthiocarboxy, hydroxymethyl, or aryloxycarboxy attached to a carbon atom that is three atoms from an oxygen attached to the phosphorus;

Z is selected from the group consisting of $-CH_2$ OH, $-CH_2$ $OCOR^3$, $-CH_2$ $OC(O)SR^3$, $-CH_2$ OCO_2 R^3, $-SR^3$, $-S(O)R^3$, $-CH_2$ N_3, $-CH_2$ NR^2_2, $-CH_2$ Ar, -CH(Ar)OH, $-CH(CH=CR^2$ $R^2)OH$, $-CH(C\equiv CR^2)OH$, and $-R^2$;

with the provisos that:

a) V, Z, W are not all –H; and

b) when Z is $-R^2$, then at least one of V and W is not –H or $-R^9$;

R^2 is selected from the group consisting of R^3 and –H;

R^3 is selected from the group consisting of alkyl, aryl, alicyclic, heteroalicyclic, and aralkyl;

R^4 is independently selected from the group consisting of –H, lower alkyl, lower alicyclic, lower heteroalicyclic, lower aralkyl, and lower aryl;

R^5 is selected from the group consisting of lower alkyl, lower aryl, lower aralkyl, lower alicyclic, and lower heteroalicyclic;

R^6 is independently selected from the group consisting of –H, and lower alkyl;

R^7 is independently selected from the group consisting of –H, lower alkyl, lower alicyclic, lower heteroalicyclic, lower aralkyl, lower aryl, and $–C(O)R^{10}$;

R^8 is independently selected from the group consisting of –H, lower alkyl, lower aralkyl, lower aryl, lower alicyclic, $–C(O)R^{10}$, or together said R^8 groups form a bidendate alkylene;

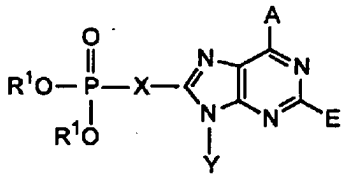
R^9 is selected from the group consisting of alkyl, aralkyl, alicyclic, and heteroalicyclic;

R^{10} is selected from the group consisting of –H, lower alkyl, $–NH_2$, lower aryl, and lower perhaloalkyl;

R^{11} is selected from the group consisting of alkyl, aryl, –OH, $–NH_2$ and $–OR^3$; and

pharmaceutically acceptable prodrugs and salts thereof.

47. (Currently Amended) A method of treating insulin resistance comprising administering to patients ~~in need thereof~~ a pharmaceutically effective amount of an FBPase inhibitor of formula 1:



wherein

A is selected from the group consisting of $–NR^8{}_2$, $–NHSO_2 R^3$, $–OR^5$, $–SR^5$, halo, lower alkyl, $–CON(R^4)_2$, guanidino, amidino, –H, and perhaloalkyl;

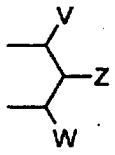
E is selected from the group consisting of –H, halo, lower alkylthio, lower perhaloalkyl, lower alkyl, lower alkenyl, lower alkynyl, lower alkoxy, –CN, and $–NR^7{}_2$;

X is selected from the group consisting of -alk-NR–, alkylene, alkenylene, alkynylene, arylene, heteroarylene, -alk-NR-alk-, -alk-O-alk-, -alk-S-alk-, -alk-S–, alicyclicene, heteroalicyclicene, 1,1-dihaloalkylene, –C(O)-alk-, –NR–C(O)–NR'–, -alk-NR–C(O)–, -alk-C(O)–NR–, -Ar-alk-, and -alk-Ar-, all optionally substituted, wherein each R and R' is

independently selected from –H and lower alkyl, and wherein each "alk" and "Ar" is an independently selected alkylene or arylene, respectively;

Y is selected from the group consisting of –H, alkyl, alkenyl, alkynyl, aryl, alicyclic, heteroalicyclic, aralkyl, aryloxyalkyl, alkoxyalkyl, $-C(O)R^3$, $-S(O)_2 R^3$, $-C(O)-OR^3$, $-CONHR^3$, $-NR^2_2$, and $-OR^3$, all except H are optionally substituted;

R^1 is independently selected from the group consisting of –H, alkyl, aryl, heteroalicyclic where the cyclic moiety contains a carbonate or thiocarbonate, $-C(R^2)_2$ -aryl, -alk-aryl, $-C(R^2)_2 OC(O)NR^2_2$, $-NR^2 -C(O)-R^3$, $-C(R^2)_2 -OC(O)R^3$, $-C(R^2)_2 -O-C(O)OR^3$, $-C(R^2)_2 OC(O)SR^3$, -alk-S–C(O)R^3, -alk-S–S-alkylhydroxy, and -alk-S–S–S-alkylhydroxy, or together R^1 and R^1 are -alk-S–S-alk- to form a cyclic group, wherein each "alk" is an independently selected alkylene, or together R^1 and R^1 are



wherein

V and W are independently selected from the group consisting of hydrogen, aryl, substituted aryl, heteroaryl, substituted heteroaryl, 1-alkenyl, 1-alkynyl, and $-R^9$; or

together V and Z are connected via a chain of 3-5 atoms, only one of which can be a heteroatom, to form part of a cyclic group substituted with hydroxy, acyloxy, alkoxycarboxy, or aryloxycarboxy attached to a carbon atom that is three atoms from an oxygen attached to the phosphorus; or

together V and W are connected via a chain of 3 carbon atoms to form part of a cyclic group substituted with hydroxy, acyloxy, alkoxycarboxy, alkylthiocarboxy, hydroxymethyl, or aryloxycarboxy attached to a carbon atom that is three atoms from an oxygen attached to the phosphorus;

Z is selected from the group consisting of $-CH_2OH$, $-CH_2OCOR^3$, $-CH_2OC(O)SR^3$, $-CH_2OCO_2R^3$, $-SR^3$, $-S(O)R^3$, $-CH_2N_3$, $-CH_2NR^2_2$, $-CH_2Ar$, $-CH(Ar)OH$, $-CH(CH=CR^2R^2)OH$, $-CH(C\equiv CR^2)OH$, and $-R^2$;

with the provisos that:

a) V, Z, W are not all –H; and

b) when Z is $-R^2$, then at least one of V and W is not –H or $-R^9$;

R^2 is selected from the group consisting of R^3 and –H;

R^3 is selected from the group consisting of alkyl, aryl, alicyclic, heteroalicyclic, and aralkyl;

R^4 is independently selected from the group consisting of –H, lower alkyl, lower alicyclic, lower heteroalicyclic, lower aralkyl, and lower aryl;

R^5 is selected from the group consisting of lower alkyl, lower aryl, lower aralkyl, lower alicyclic, and lower heteroalicyclic;

R^6 is independently selected from the group consisting of –H, and lower alkyl;

R^7 is independently selected from the group consisting of –H, lower alkyl, lower alicyclic, lower heteroalicyclic, lower aralkyl, lower aryl, and $-C(O)R^{10}$;

R^8 is independently selected from the group consisting of –H, lower alkyl, lower aralkyl, lower aryl, lower alicyclic, $-C(O)R^{10}$, or together said R^8 groups form a bidendate alkylene;

R^9 is selected from the group consisting of alkyl, aralkyl, alicyclic, and heteroalicyclic;

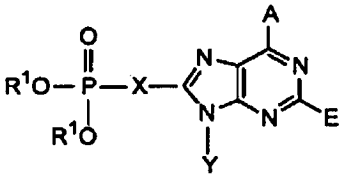
R^{10} is selected from the group consisting of –H, lower alkyl, $-NH_2$, lower aryl, and lower perhaloalkyl;

R^{11} is selected from the group consisting of alkyl, aryl, –OH, $-NH_2$ and $-OR^3$; and

pharmaceutically acceptable prodrugs and salts thereof.

48. (Previously Added) The method of claim 1 wherein said animals at risk of developing diabetes have a disease or condition selected from the group consisting of impaired glucose tolerance, insulin resistance, hyperglycemia, obesity, accelerated gluconeogenesis, and increased hepatic glucose output.

49. (Previously Added) A method of treating or preventing a disease or condition associated with increased insulin levels selected from the group consisting of hyperlipidemia, atherosclerosis, ischemic injury, and hypercholesterolemia which comprises administering to an animal in need thereof a pharmaceutically effective amount of an FBPase inhibitor of formula 1:



wherein

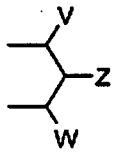
A is selected from the group consisting of $-NR^8_2$, $-NHSO_2R^3$, $-OR^5$, $-SR^5$, halo, lower alkyl, $-CON(R^4)_2$, guanidino, amidino, –H, and perhaloalkyl;

E is selected from the group consisting of –H, halo, lower alkylthio, lower perhaloalkyl, lower alkyl, lower alkenyl, lower alkynyl, lower alkoxy, –CN, and $-NR^7_2$;

X is selected from the group consisting of -alk-NR–, alkylene, alkenylene, alkynylene, arylene, heteroarylene, -alk-NR-alk-, -alk-O-alk-, -alk-S-alk-, -alk-S–, alicyclicene, heteroalicyclicene, 1,1-dihaloalkylene, –C(O)-alk-, –NR–C(O)–NR'–, -alk-NR–C(O)–, -alk-C(O)–NR–, -Ar-alk-, and -alk-Ar-, all optionally substituted, wherein each R and R' is independently selected from –H and lower alkyl, and wherein each "alk" and "Ar" is an independently selected alkylene or arylene, respectively;

Y is selected from the group consisting of –H, alkyl, alkenyl, alkynyl, aryl, alicyclic, heteroalicyclic, aralkyl, aryloxyalkyl, alkoxyalkyl, $-C(O)R^3$, $-S(O)_2R^3$, $-C(O)–OR^3$, $-CONHR^3$, $-NR^2_2$, and $-OR^3$, all except H are optionally substituted;

R^1 is independently selected from the group consisting of –H, alkyl, aryl, heteroalicyclic where the cyclic moiety contains a carbonate or thiocarbonate, $-C(R^2)_2$ -aryl, -alk-aryl, $-C(R^2)_2$ $OC(O)NR^2_2$, $-NR^2$ –C(O)–R^3, $-C(R^2)_2$ –$OC(O)R^3$, $-C(R^2)_2$ –O–$C(O)OR^3$, $-C(R^2)_2$ $OC(O)SR^3$, -alk-S–$C(O)R^3$, -alk-S–S-alkylhydroxy, and -alk-S–S–S-alkylhydroxy, or together R^1 and R^1 are -alk-S–S-alk- to form a cyclic group, wherein each "alk" is an independently selected alkylene, or together R^1 and R^1 are



wherein

V and W are independently selected from the group consisting of hydrogen, aryl, substituted aryl, heteroaryl, substituted heteroaryl, 1-alkenyl, 1-alkynyl, and $-R^9$; or

together V and Z are connected via a chain of 3-5 atoms, only one of which can be a heteroatom, to form part of a cyclic group substituted with hydroxy, acyloxy, alkoxycarboxy, or aryloxycarboxy attached to a carbon atom that is three atoms from an oxygen attached to the phosphorus; or

together V and W are connected via a chain of 3 carbon atoms to form part of a cyclic group substituted with hydroxy, acyloxy, alkoxycarboxy, alkylthiocarboxy, hydroxymethyl, or aryloxycarboxy attached to a carbon atom that is three atoms from an oxygen attached to the phosphorus;

Z is selected from the group consisting of $-CH_2$ OH, $-CH_2$ $OCOR^3$, $-CH_2$ $OC(O)SR^3$, $-CH_2$ OCO_2 R^3, $-SR^3$, $-S(O)R^3$, $-CH_2$ N_3, $-CH_2$ NR^2_2, $-CH_2$ Ar, –CH(Ar)OH, –CH(CH=CR^2 R^2)OH, –CH(C≡ CR^2)OH, and $-R^2$;

with the provisos that:

a) V, Z, W are not all –H; and

b) when Z is $-R^2$, then at least one of V and W is not –H or $-R^9$;

R^2 is selected from the group consisting of R^3 and –H;

R^3 is selected from the group consisting of alkyl, aryl, alicyclic, heteroalicyclic, and aralkyl;

R^4 is independently selected from the group consisting of –H, lower alkyl, lower alicyclic, lower heteroalicyclic, lower aralkyl, and lower aryl;

R^5 is selected from the group consisting of lower alkyl, lower aryl, lower aralkyl, lower alicyclic, and lower heteroalicyclic;

R^6 is independently selected from the group consisting of –H, and lower alkyl;

R^7 is independently selected from the group consisting of –H, lower alkyl, lower alicyclic, lower heteroalicyclic, lower aralkyl, lower aryl, and $-C(O)R^{10}$;

R^8 is independently selected from the group consisting of –H, lower alkyl, lower aralkyl, lower aryl, lower alicyclic, $-C(O)R^{10}$, or together said R^8 groups form a bidendate alkylene;

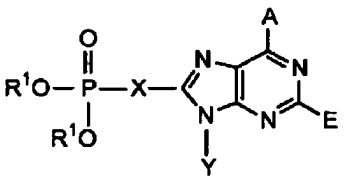
R^9 is selected from the group consisting of alkyl, aralkyl, alicyclic, and heteroalicyclic;

R^{10} is selected from the group consisting of –H, lower alkyl, $-NH_2$, lower aryl, and lower perhaloalkyl;

R^{11} is selected from the group consisting of alkyl, aryl, –OH, $-NH_2$ and $-OR^3$; and

pharmaceutically acceptable prodrugs and salts thereof.

50. (Currently Amended) A pharmaceutical composition comprising a pharmaceutically effective amount of an FBPase inhibitor of formula 1:



wherein

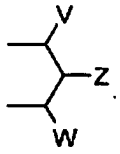
A is selected from the group consisting of $-NR^8_2$, $-NHSO_2 R^3$, $-OR^5$, $-SR^5$, halo, lower alkyl, $-CON(R^4)_2$, guanidino, amidino, –H, and perhaloalkyl;

E is selected from the group consisting of –H, halo, lower alkylthio, lower perhaloalkyl, lower alkyl, lower alkenyl, lower alkynyl, lower alkoxy, –CN, and $-NR^7_2$;

X is selected from the group consisting of -alk-NR–, alkylene, alkenylene, alkynylene, arylene, heteroarylene, -alk-NR-alk-, -alk-O-alk-, -alk-S-alk-, -alk-S–, alicyclicene, heteroalicyclicene, 1,1-dihaloalkylene, –C(O)-alk-, –NR–C(O)–NR'–, -alk-NR–C(O)–, -alk-C(O)–NR–, -Ar-alk-, and -alk-Ar-, all optionally substituted, wherein each R and R' is independently selected from –H and lower alkyl, and wherein each "alk" and "Ar" is an independently selected alkylene or arylene, respectively;

Y is selected from the group consisting of –H, alkyl, alkenyl, alkynyl, aryl, alicyclic, heteroalicyclic, aralkyl, aryloxyalkyl, alkoxyalkyl, $-C(O)R^3$, $-S(O)_2 R^3$, $-C(O)–OR^3$, $-CONHR^3$, $-NR^2_2$, and $-OR^3$, all except H are optionally substituted;

R^1 is independently selected from the group consisting of –H, alkyl, aryl, heteroalicyclic where the cyclic moiety contains a carbonate or thiocarbonate, $-C(R^2)_2$ -aryl, -alk-aryl, $-C(R^2)_2 OC(O)NR^2_2$, $-NR^2 –C(O)–R^3$, $-C(R^2)_2 –OC(O)R^3$, $-C(R^2)_2 –O–C(O)OR^3$, $-C(R^2)_2 OC(O)SR^3$, -alk-S–C(O)R^3, -alk-S–S-alkylhydroxy, and -alk-S–S–S-alkylhydroxy, or together R^1 and R^1 are -alk-S–S-alk- to form a cyclic group, wherein each "alk" is an independently selected alkylene, or together R^1 and R^1 are



wherein

V and W are independently selected from the group consisting of hydrogen, aryl, substituted aryl, heteroaryl, substituted heteroaryl, 1-alkenyl, 1-alkynyl, and $-R^9$; or

together V and Z are connected via a chain of 3-5 atoms, only one of which can be a heteroatom, to form part of a cyclic group substituted with hydroxy, acyloxy, alkoxycarboxy, or aryloxycarboxy attached to a carbon atom that is three atoms from an oxygen attached to the phosphorus; or

together V and W are connected via a chain of 3 carbon atoms to form part of a cyclic group substituted with hydroxy, acyloxy, alkoxycarboxy, alkylthiocarboxy, hydroxymethyl, or aryloxycarboxy attached to a carbon atom that is three atoms from an oxygen attached to the phosphorus;

Z is selected from the group consisting of $-CH_2$ OH, $-CH_2$ $OCOR^3$, $-CH_2$ $OC(O)SR^3$, $-CH_2$ OCO_2 R^3, $-SR^3$, $-S(O)R^3$, $-CH_2$ N_3, $-CH_2$ NR^2_2, $-CH_2$ Ar, –CH(Ar)OH, $-CH(CH=CR^2$ $R^2)OH$, $-CH(C\equiv CR^2)OH$, and $-R^2$;

with the provisos that:

a) V, Z, W are not all –H; and

b) when Z is $-R^2$, then at least one of V and W is not –H or $-R^9$;

R^2 is selected from the group consisting of R^3 and –H;

R^3 is selected from the group consisting of alkyl, aryl, alicyclic, heteroalicyclic, and aralkyl;

R^4 is independently selected from the group consisting of –H, lower alkyl, lower alicyclic, lower heteroalicyclic, lower aralkyl, and lower aryl;

R^5 is selected from the group consisting of lower alkyl, lower aryl, lower aralkyl, lower alicyclic, and lower heteroalicyclic;

R^6 is independently selected from the group consisting of –H, and lower alkyl;

R^7 is independently selected from the group consisting of –H, lower alkyl, lower alicyclic, lower heteroalicyclic, lower aralkyl, lower aryl, and $-C(O)R^{10}$;

R^8 is independently selected from the group consisting of –H, lower alkyl, lower aralkyl, lower aryl, lower alicyclic, $-C(O)R^{10}$, or together said R^8 groups form a bidendate alkylene;

R^9 is selected from the group consisting of alkyl, aralkyl, alicyclic, and heteroalicyclic;

R^{10} is selected from the group consisting of –H, lower alkyl, $-NH_2$, lower aryl, and lower perhaloalkyl;

R^{11} is selected from the group consisting of alkyl, aryl, –OH, $-NH_2$ and $-OR^3$; and

pharmaceutically acceptable prodrugs and salts thereof; and a pharmaceutically acceptable carrier.